

D) REMARKS

1. Acknowledged.

2. Original Fig. 6 shows the toggle valve 124 between the clean water flow channel 142 and the chemical and water flow channel 141. Newly added Fig. 7 shows a slightly different cross-sectional view of the toggle valve 124, one in which the function of the aperture 125 is more apparent. Specifically Fig. 7 shows the toggle valve in the chemical and water dispensing position. Fig. 8 shows the toggle valve in the water only dispensing position. Applicant respectfully submits that the new drawings show the available positions of the toggle valve 124 but do not add new matter to the application as the matter is fully disclosed in existing Fig. 6 and in paragraphs 32-33 as follows:

The toggle 113 is functionally adapted to move a toggle valve 124 within the nozzle body 102, the toggle valve 124 being biased in one direction by means of a toggle spring 126. The toggle valve 124 includes an aperture 125 defined within it. This toggle valve aperture 125 creates a water flow continuum through the water channel 121 contained within the nozzle body 102 and a secondary clean water channel 142 defined within the nozzle body 102 as well. The toggle valve 124 also includes a secondary aperture (not shown) which is disposed to one side of the first aperture 125 and which provides a similar water flow continuum through the water channel 121 and the secondary chemical flow channel 141 defined within the nozzle body 102.

In this fourth embodiment, the outlet end 106 includes a threaded portion (not shown) disposed opposite the body 102 and adapted to releasably receive a cartridge 112. The cartridge 112 includes a clean water portion flow channel 143 and a chemical, or soap, dispensing flow channel 145 each of which communicates with a number of orifices 118, 119, respectively, located on the cartridge 112 opposite the outlet end 106. The cartridge 112 includes a chemical reservoir 144 that is functionally adapted to hold an amount of chemical, such as a cleaning soap or detergent, within it. When the cartridge 112 is engaged with the body 102, the trigger 111 can be depressed to allow water to flow through the body 102 and out of the cartridge 112. In this fashion, and with the toggle 113 in one position, clean water simply flows from the nozzle 100. With the toggle 113 in another position, however, the water becomes a water and chemical solution that is mixed within the nozzle 100 and dispensed by it as such is desired or required.

Entry of new Figs. 7 and 8 is requested.

3. Rejection Pursuant to 35 U.S.C. § 112

The Examiner rejected claims 1, 2, 4, 8-13, 15 and 18-21 under 35 U.S.C. § 112¶1 as failing to comply with the enablement requirement. As indicated above, the toggle valve 124 is disclosed in newly added Figures 7 and 8 and in paragraph 32 of the application. On those grounds, withdrawal of this rejection is respectfully requested.

4. Rejection Pursuant to 35 U.S.C. § 102(b) – Kaufman

The Examiner rejected claims 1, 2, 4, 8-13, 15 and 18-21 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 3,128,949 to Kaufman (“Kaufman”) in view of U.S. Patent No. 6,000,626 to Futo et al. (“Futo”). Essentially, the Examiner finds that:

Kaufman does not teach an outlet for discharging, either clean water from the clean water flow channel or clear water and a chemical from the chemical dispensing flow channel downstream. However, Futo et al. teaches an outlet 30 for discharging, either clean water from the clean water flow channel or clear water and a chemical from the chemical dispensing flow channel downstream. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Kaufman with an outlet for discharging either clean water or clear water and a chemical as suggested by Futo et al. Doing so would provide a compact spray nozzle.

Applicant respectfully disagrees with the Examiner’s statement regarding Futo. Futo discloses a nozzle having a water output in the form of a spray through the inner ends 192 of the recesses 190 in the nozzle. In actuality, a seal 184 precludes the passage of water radially inwardly from chamber 202 toward soap outlet member 102 and that seal 186 prevents the flow of water radially outwardly between the valve body, housing components and front cap 22. (Col. 8, line 65 to Col. 9, line 65.)

In short, the soap pump assembly 28 of Futo is a structural entity completely separate from the water sprayer assembly. The soap pump assembly has its own cylinder 94 which uses a

piston and pump actuator 96 to pump soap through slit 108 to orifice 194 in soap orifice plate 30. As a result, Futo does not teach “an outlet 30 for discharging , either clean water from the clean water flow channel or clean water and a chemical from the chemical dispensing flow channel” because Futo does not teach a design with the ability to mix a chemical and water within the sprayer. Instead, the soap pump assembly 28 is sealed from the water sprayer assembly.

If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) Although modification of Kaufman with the teaching of Futo would arguably result in a device which did have an outlet for mixed chemical and water, Kaufman would therefore be rendered unsatisfactory for its intended purpose because one of the intended purposes of Kaufman is to mix water with a chemical before it is sprayed. Likewise, modification of Futo with Kaufman would result in a sprayer that mixed chemical with water, but which would likewise render Futo unsuitable for its intended purpose.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Similar to the above, the combination of Kaufman with Futo changes the principle of operation of both. Both devices offer a water sprayer. Futo offers a chemical only spray pump. Kaufman offers a water and chemical spray. Obviously, modification of the either Futo or Kaufman with the other would change the principle of operation.

In summary, the applicant has provided a new, useful and non-obvious sprayer that can be used both as a water sprayer and as a device for spraying chemicals, such as soaps mixed with

water to increase the efficiency and effectiveness for personnel in the cleaning industry. For his ingenuity, he is entitled to the protection of the United States patent laws. Allowance of all claims as now presented is respectfully requested.

Respectfully submitted,
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